

SPECIFICATION AMENDMENT

1. Please replace the paragraph under Summary of the Invention beginning at line 6, page 3 with the following amended paragraph:

A semiconductor device comprises an active region of a first ~~conducting~~ **conductivity** type including a transistor structure, and a ring shaped region of the first ~~conducting~~ **conductivity** type extending from a surface of the active region into the active region and substantially surrounding the transistor structure.

2. Please replace the paragraph under Summary of the Invention beginning at line 10, page 3 with the following amended paragraph:

The transistor structure may comprise, a drain region, a source region, wherein the drain and the source define a channel, a gate being arranged above said channel, and a sinker structure of said first ~~conducting~~ **conductivity** type arranged substantially along said source region reaching from the surface of the active area next to the source region to the bottom of the active area. The p ring can be less doped than the sinker structure. The device may further comprise a metal layer on the backside of the semiconductor device. The transistor structure can be a two transistor structure comprising, a common drain region, a first source region arranged on one side of the common drain region, a second source region arranged on the respective opposite side of the drain region, wherein the drain region and the source regions each define a channel, a first and second gate being arranged above said channels, and a first and second sinker structure of said first ~~conducting~~ **conductivity** type arranged substantially along said source regions reaching from the surface of the active area next to the respective source regions to the bottom of the active area. The drain region may comprise a lightly doped drain region. The ring can be doped in the range of 10^{14} - $10^{15}/\text{cm}^2$. The active area can be created and enclosed by a LOCOS process. The active area may comprise a substrate and an epitaxial layer on top of said substrate. The first ~~conducting~~ **conductivity** type can be the p type or n type. The ring can be created by masked ion implant. Boron can be used as a dopant. The ring may have a rectangular, circular, oval, or polygon shape.

The ring may comprise at least one gap that does not substantially influence an insulating function of the ring.

3. Please replace the paragraph under Summary of the Invention beginning at line 3, page 4 with the following amended paragraph:

According to another embodiment, a semiconductor device comprises an active region of a first **conducting conductivity** type including a transistor structure, wherein the transistor structure comprises, a drain region of a second type, a channel, and a gate being arranged above said channel, and a ring shaped region of the first **conducting conductivity** type extending from a surface of the active region into the active region and surrounding the transistor structure.

4. Please replace the paragraph under Summary of the Invention beginning at line 8, page 4 with the following amended paragraph:

The device may further comprise a source region of the second type arranged along one side of the drain region, and a sinker structure of said first **conducting conductivity** type arranged substantially along said source region reaching from the surface of the active area next to the source region to the bottom of the active area. The device can also further comprise a second source region arranged on the respective opposite side of the drain region, wherein the drain region and the source regions each define a channel, a first and second gate being arranged above said channels, and a first and second sinker structure of said first **conducting conductivity** type arranged substantially along said source regions reaching from the surface of the active area next to the respective source regions to the bottom of the active area. Again, the drain region may comprise a lightly doped drain region and the device may further comprise a metal layer on the backside of the semiconductor device. The ring may be less doped than the sinker structure and can be doped in the range of 10^{14} - $10^{15}/\text{cm}^2$. The active area can be created and enclosed by a LOCOS process. The active area may comprise a substrate and an epitaxial layer on top of said substrate. The first **conducting conductivity** type can be the p type or n-type. The ring can be created by masked ion

implant. Boron can be used as a dopant. The ring may have a rectangular, circular, oval, polygon, or partially open shape. The ring may further comprise at least one gap that does not substantially influence an insulating function of the ring.

5. Please replace the paragraph under Summary of the Invention beginning at line 26, page 4 with the following amended paragraph:

A method of manufacturing a semiconductor device comprises the steps of:

- forming an active region of a first **conducting conductivity** type within a semiconductor material;
- forming a transistor structure, and
- forming a ring shaped region of the first **conducting conductivity** type extending from a surface of the active region into the active region and surrounding the transistor structure.

6. Please replace the paragraph under Summary of the Invention beginning at line 6, page 5 with the following amended paragraph:

The step of forming a transistor structure may comprise the steps of forming a drain region of a second type, a source region of the second type arranged along one side of the drain region, and a sinker structure of said first **conducting conductivity** type arranged substantially along said source region reaching from the surface of the active area next to the source region to the bottom of the active area. The method may further comprise the step of forming a second source region arranged on the respective opposite side of the drain region, and a first and second sinker structure of said first **conducting conductivity** type arranged substantially along said source regions reaching from the surface of the active area next to the respective source regions to the bottom of the active area. The drain region can be formed in such a way that it comprises a lightly doped drain region. The method may further comprise the step of arranging a metal layer on the backside of the semiconductor device. The step of forming the ring may include the step of doping the ring less than the sinker structure.

The ring can be doped in the range of 10^{14} - $10^{15}/\text{cm}^2$. The active area can be created and enclosed by a LOCOS process. The ring can be created by masked ion implant. Boron may be used as a dopant. The ring can have a rectangular, circular, oval, polygon, or partially open shape.